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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,281	08/27/2003	Gary A. Landolt	LAND 8668US	5490
1688	7590	09/16/2004	EXAMINER	
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			DAVIS, OCTAVIA L	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/649,281	Applicant(s) LANDOLT, GARY A.	
	Examiner Octavia Davis	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/27/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroll et al in view of Trail, Jr.

Regarding claims 1, 14 and 17, Kroll et al disclose an apparatus and method for testing torsion bars comprising a frame 12 having a head end and a tail end and two channels, each of which defines an axis and is configured to receive a torsion bar T, a force applicator 20 mounted on the frame at its head end and including a drive element 104 that is capable of undergoing a displacement from a retracted position to extended positions and exerting a force as it displaces, the drive element including an adjusting screw (not shown), a measuring unit 22 mounted on the frame at its tail end and being capable of measuring a force and a first torque arm 18 configured to couple one end of a torsion bar in one of the channels with the drive element of the force applicator but does not disclose a second torque arm configured to couple with a torsion bar in one of the channels and transmit torque exerted on it to the measuring unit, so that the measuring unit can measure the force derived from the torque. However, Trail, Jr. discloses an apparatus for measuring the tension in an endless elongate member comprising a second torque arm 40

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coupled with a torsion bar 38 in a channel of a frame 16, the torque arm transmitting torque exerted on it to a measuring unit 80, 80A (See Col. 3, lines 9 – 29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kroll et al according to the teachings of Trail, Jr. for the purpose of, utilizing moment arms for applying a torque to the torsion bar in response to the application of the reaction force to the sensing roll (See Trail, Jr., Col. 2, lines 21 – 25).

Regarding claim 2, in Kroll et al, the force applicator 20 is located between the axes of the two channels, and the measuring unit is located between the axes of the two channels (See Fig. 1).

Regarding claims 3 and 18, in Kroll et al, the axes of the two channels cross between the head and tail ends of the frame and lie in a common plane (See Fig. 1).

Regarding claims 4 and 19, in Kroll et al, the two axes lie in essentially the same plane, and the drive element of the force applicator 20 displaces generally perpendicular to the plane.

Regarding claims 5, 6, 15, 16, 21 and 22, Kroll et al disclose all of the limitations of these claims except for teachings that the first torque arm at one end lies along the axis for the one channel and at its opposite end has a swivel and a force transfer element, constituting an adjusting screw, extends from the swivel and bearing against the drive element. However, in Trail, Jr., the torque arm 40 includes a swivel 36 and a force transfer element 76 extending from the swivel and bearing against a drive element (See Fig. 1, See Col. 3, lines 61 – 67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kroll et al according to the teachings of Trail, Jr. for the purpose of, utilizing a force transfer element to align a sensing roll so that the axis of the roll is horizontal

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and perpendicular to the direction of the tow travel (See Trail, Jr. Col. 3, lines 67 and 18 and Col. 4, lines 1 – 3).

Regarding claims 7 – 9, 14 and 20, Kroll et al disclose all of the limitations of these claims except for teachings that the drive element has a surface against which the force transfer element of the first torque arm bears, wherein the surface of the drive element contains a depression in which the end of the transfer element initially seats to establish a predetermined distance between the end of the transfer element and the axis of the channel at which said other end of the torque arm is located. However, in Trail, Jr., drive element 22 includes a depression in which the force transfer element 76 seats (See Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kroll et al according to the teachings of Trail, Jr. for the purpose of, providing an adjustable stop device to locate a sensing roll in the tow-displacing position (See Trail, Jr. Col. 3, lines 61 – 67).

Regarding claim 10, in Kroll et al, bushing 45 is located on the frame 12 and is aligned to define the channels.

Regarding claims 11 and 23, in Kroll et al, a keyway 78 receives members 74 that are engaged with the drive element and holds the drive element 104 in a predetermined extended position (See Cols. 3 and 4, lines 64 – 67 and 1 – 5).

Regarding claims 12, 13 and 24, in Kroll et al, the drive element 104 is capable of extending beyond the predetermined extended position, so that the key may be engaged with the drive element, whereupon the drive element will retract no further than the predetermined extended position.

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Conclusion

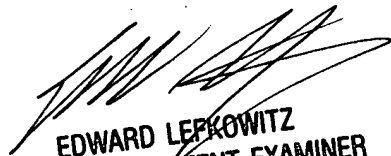
3. Any inquiry concerning this communication should be directed to examiner Octavia Davis at telephone number (571) 272 - 2176. The examiner can normally be reached on Monday - Thursdays (9:00 - 5:00), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on (571) 272 - 2180. The fax phone number for the organization where this application where this application or proceeding is assigned is (703) 872 - 9306.



OD/2855

9/14/04



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800